

# HDTV Router

**HD**  
ready

## Multi-Format Audio/Visual Switch/Router for Home Theater Entertainment Systems and Professional Installations

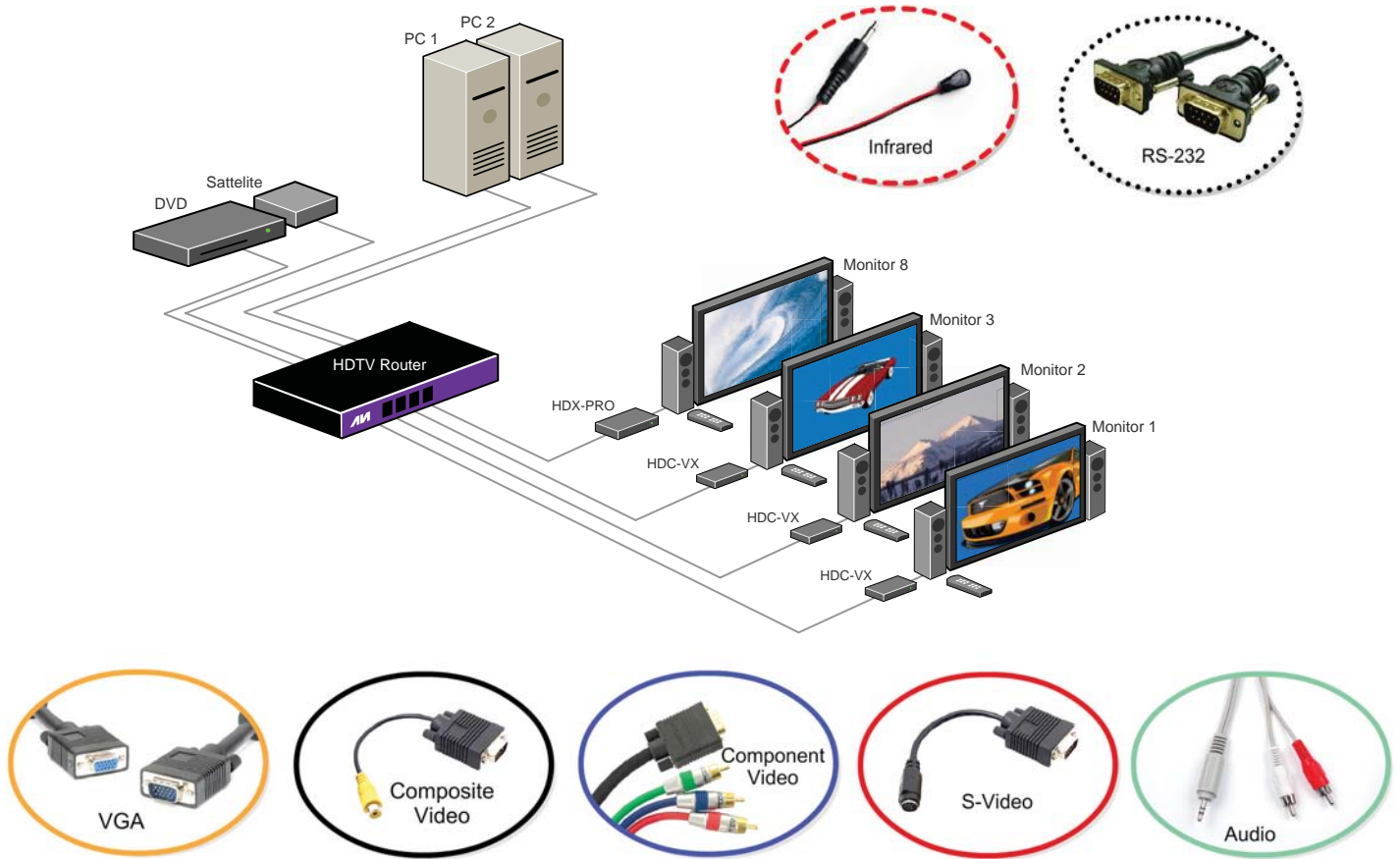


HDTV Router combines all the functions of an audio matrix, video matrix, IR matrix and a full RS-232 matrix into one sleek, cost-effective compact design. This gives you absolute control over all of your home entertainment components, how your system is set up and allows you to extend each of the component signals up to 1,699 feet!

  
Made in the USA

**Smart-AVI**  
SMART AUDIO VIDEO INNOVATION

## HDTV Router at a Glance



### Input/Output Types

HDTV Router is compatible with the following interfaces:

- VGA/XVGA
- Composite
- Component
- S-Video
- Stereo Analog Audio
- Infrared
- RS-232

### RS-232

With the integrated RS-232 matrix you can:

- Remotely power on and off all of the connected display devices
- Send commands such as video schedules or input source
- Reporting
- Enable touch-screen displays to send and receive data
- Interrupt displays with alerts and urgent messages

### Infrared

The built-in infrared extender gives you the ability to remotely change your channels, control components, such as DVD players and turn off/on devices located up to 1,699 feet away.

### Controlling HDTV Router

You can control HDTV Router via:

- Infrared (Remote Control)
- RS-232 with SmartAVI's SmartControl Interface
- Over the Internet via TCP/IP

## HDTV Router Supported Format

HDTV Router provides a high-quality, cost-effective solution for the easy distribution of composite video, RGBS, UXGA, YUV, Y/C, CVBS, HDTV and stereo audio signals up to 1,699 feet over CAT5e/6/7 structured cabling.

Route up to 8 UXGA video and stereo audio sources to up to 64 remote monitors and speakers located as far away as 1,699 feet using SmartAVI's XT receivers and CAT5 cable. You can also route additional sound sources to external amplifiers independently. This is useful if you'd like to add additional sound sources such as background music or security features to your multimedia system.

Using the wide array of SmartAVI extenders, the range of universal signal formats that HDTV Router can support covers every home theater need. Whether composite, component or VGA, we have the cost-effective, perfect formatting solutions that will work seamlessly with your system.

### XT-AV

The XT-AV is the perfect economical A/V extension solution capable of delivering high-quality video and stereo audio up to 1,000 feet away via CAT5 cable. The XT-AV does not support RS-232 or IR control.



### XT-Pro

XTPro is the advanced extension solution that supports UXVGA (2 screens) with audio, RS-232 and infrared control. This unit is capable of switching from a remote location via IR control.



### HD-XT

HD-XT is the advanced extension solution that supports component video with audio, RS-232 and infrared control. Component is capable of switching from a remote location via IR.



### HDC-VX

The HDC-VX is the perfect solution for extending older NTSC video signals to any display monitor or television over a CAT5 cable.



## HDTV Router Control Options

The full duplex infrared and RS-232 feature gives you full control of both the matrix and all connected displays and devices!

HDTV Router is perfect for the serious home theater and entertainment enthusiast, but it is also more than powerful enough for professional systems integrators:

With HDTV Router, system architects can:

- Distribute live data such as flight information
- Make existing digital signage even more effective
- Make corporate and educational programming easy to manage and access

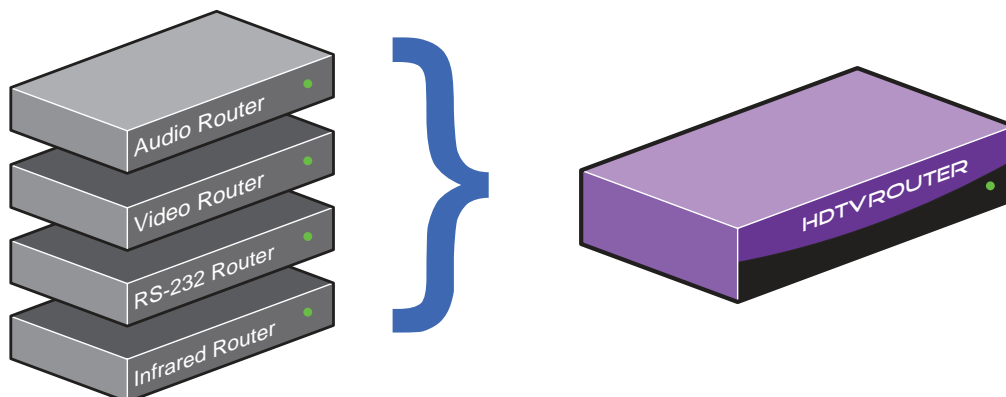
IR Features:

- Control large groups of TV monitors and A/V components from a single location
- Offer remote users full control over DVD players, gaming consoles and/or cable boxes by selecting channels from the matrix
- IR function is completely transparent and supports any infrared frequency between 20 and 100 KHz
- Offers remote users full control over the DVD, VCR or cable box by selecting a channel from the matrix
- The IR function is completely transparent and supports any infrared frequency between 20 and 100 KHz

## HDTV Router Features

- Routes additional audio signals independently
- Integrated IR and RS-232 router for each station
- Optimal high-quality audio switching
- Optimal high-quality video switching
- Supports resolutions up to 1920 x 1200
- Full duplex infrared and RS-232 control for matrix and connected devices
- Completely transparent IR function supports all frequencies between 20 and 100 KHz
- PC Windows® control software
- Integral UTP distribution
- Cable compensation up to 1,699 feet
- Compact metal housing for receivers
- Can distribute multiple video signals (RGB, YUV, RGBS, HDTV)
- HD Compatible (480p, 720p, 1080, 1080p)

## Four Devices in One!



## HDTV Router Specifications

Video	
Bandwidth	400 MHz
Input Signal Level	1 Volt pk-pk into 75R
Output Impedance	100 Ohms
Input Impedance	75 Ohms
Connector	8 x HD15 socket female
Format	VGA/SVGA/XGA/RGBHV/RGsb/ CVBS/YC/YUV/RGBS/HDTV
Syncs	TTL5VDC
Bandwidth	Horizontal Sync up to 85KHz
RS-232	8 x RS-232 DB9 female, TX, RX, GND
Infrared	8 x IR 3.5mm jack to IR emitter
Front Panel	8 x RJ45 with video, audio and data modulated within single UTP

Audio	
Signal	15KHz 0dB unbalanced 100 Ohms impedance
Connector	RCA or 3.5 stereo jack
Power	
Voltage	90-230V IEC 1A A/S 56/60 Hz
Control	
IR	3.5mm connector with 38kHz
DB9	female RS-232 or RS-422 @ 9600bps
Dimensions	
Height X width X Depth	3U (88mm) x 19" x 450mm
Weight	9 lb.



## Accessories

These SmartAVI accessories work with HDTV Router, giving you even more control over your home theater system.



IR EYE

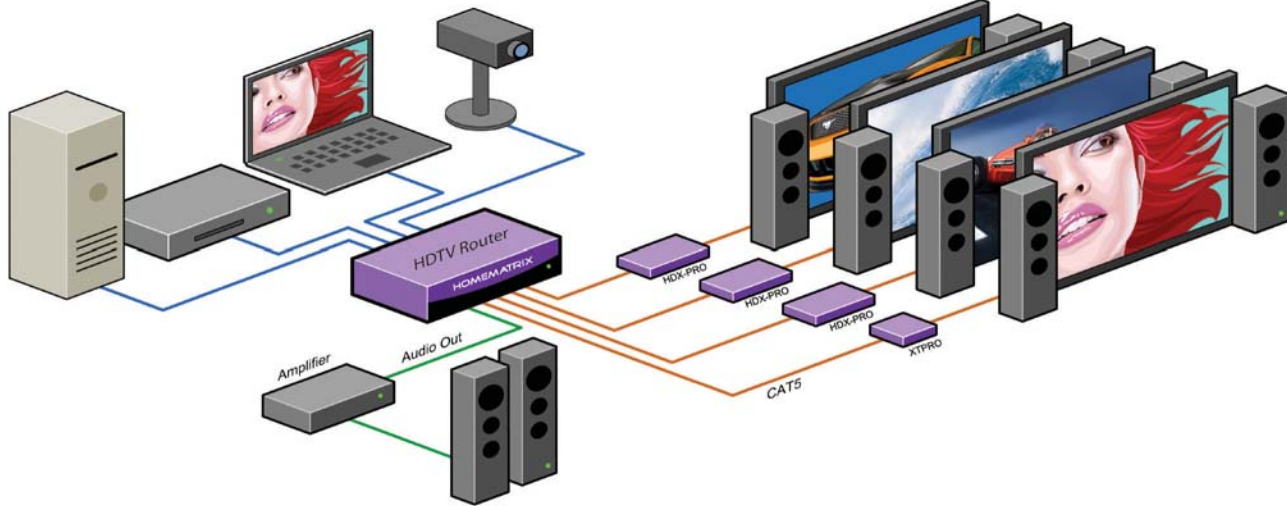


Smart Remote



IR Emitter

## Application Diagram



### XTPRO

Receiver with dual monitors,  
audio and IR/RS-232 support

<b>VGA Data</b>	
Format	RGBHV, RGB, YUV, Y/C, CVBS
Resolution	Up to 1900 x 1200 VGA, SVGA, XGA, SXGA
Connector Type	HD 15 socket
<b>Audio</b>	
Signal Type	Stereo unbalanced
Connector Type	3.5mm jack socket
<b>Infrared</b>	
Signal Type	30 to 110Khz
Connector Type	3.5mm socket
<b>RS-232</b>	
Speed	2400 to 115Kbps
Connector Type	DB9 male
<b>Power</b>	
Requirements	5VDC @.5A
Connector	2.1mm DC jack (center +ve)
<b>Physical</b>	
Dimensions	135 x 90 x 23mm (26 with pegs)
Weight	.8 lbs or .36 kg



### HDX-PRO

<b>Component Video</b>	
Format	RGsB, YUV, Y/C, CVBS
Resolution	Up to 1920 x 1200 (HDTV)
Connector Type	RCA X3
<b>Audio</b>	
Signal Type	Stereo unbalanced
Connector Type	RCA
<b>Infrared</b>	
Signal Type	30 to 110Khz
Connector Type	3.5mm socket
<b>RS-232</b>	
Speed	2400 to 115Kbps
Connector Type	DB9 male
<b>Power</b>	
Requirements	5VDC @.5A
Connector	2.1mm DC jack (center +ve)
<b>Physical</b>	
Dimensions	135 x 90 x 23mm (26 with pegs)
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## Ordering Information

Matrix	
HDC-MXS	HDTV Component or UXGA + Audio over CAT5 8x8 Matrix with RS232 Control. Includes: [HDC-MX0808, CCRS232MF06, SM-CSW & (CCPWR06US)]
Receivers	
XTP-RXS	XTPRO UXGA/Audio/RS232/IR CAT5 Receiver with Dual Video support VGA connector for video and 3.5mm jack for audio
XTP-RXLS	XTPRO UXGA/Audio/RS232/IR CAT5 Long Range Receiver with Dual Video support VGA connector for video and 3.5mm jack for audio
XTA-RXS	XT-AV UXGA/Audio Receiver with VGA connector for video and jack 3.5mm for audio
HDP-RXS	HDTV Video/Audio/RS232/IR CAT5 Receiver with Dual Video support 3 x RCA connector for video and RCA for audio
HDC-VX-RXS	Composite Video/Audio/IR CAT5 Point to Point Receiver 3 X RCA connector for video and RCA for audio
Cables & Accessories	
SM-TCPS	TCP/IP Control. Includes: [SMTCP, (CCRS232MM ) & (PS5VD1A)]
SM-EYE	External Infrared Receiver; IR range of 10 to 30 ft.
SM-LED	IR Emitter 6 ft. single LED
SM-CSW	GUI software for source/destination selection and name editing for all SmartAVI Matrixes/ routers
CCVGAMM06	6' male-to-male UXGA cable
CCVGARCAMM06	6' VGA male-to-RCA male
AD3.5MM2RCA	Audio adapter from 3.5mm to 2 RCAs
SM-RMT	Remote Control type 1

### HDTV Router can be used anywhere digital media is displayed, including:

Video walls, audio/visual presentations, digital signage deployment, shopping centers, airports, theme parks, resorts and casinos, security centers, dealer rooms, points-of-sale and control rooms, to name a few!

Many industry-leading companies have recognized the innovation and power of SmartAVI's technologies and have successfully implemented them within their systems. Users of SmartAVI technology include:



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